

Naval Weapons Station Yorktown Restoration Advisory Board Meeting February 19, 2003

Charles E. Brown Park Community Building
Old Williamsburg Road

09.03-2/19/03-01260

AGENDA

RESTORATION ADVISORY BOARD (RAB)

NAVAL WEAPONS STATION YORKTOWN

CHARLES E. BROWN PARK COMMUNITY BUILDING

OLD WILLIAMSBURG ROAD (Route 238)

Wednesday, 19 February 2003, 6:30 PM

WELCOME/INTRODUCTION.....	Jim Kemp (5 min) Public Affairs Officer
NAVY CO-CHAIR.....	Captain K. L. Skudin Commanding Officer
COMMUNITY CO-CHAIR.....	Jay Dewing
WPNSTA Sites 4 & 6 Update.....	Jeffrey Harlow (10 minutes)
WPNSTA Site 23 Update.....	Jeffrey Harlow (15 minutes)
Five Year Review Status Update.....	Jeffrey Harlow (5 minutes)
CAX Site 1 Status.....	Don Joiner (Baker) (10 minutes)
Groundwater Operable Unit 1.....	Don Joiner (Baker) (10 minutes)
Upcoming Records of Decision.....	Valerie Walker (15 minutes)
Transition of USEPA Reg. III Representatives.....	Valerie Walker (10 minutes)
Open Discussion/Community Remarks.....	Jim Kemp (10 minutes)
• Update/Confirm Deliverables Distribution List	

CALENDAR OF FUTURE RAB MEETINGS:

May 21, 2003
August 20, 2003
November 19, 2003

CLOSING REMARKS/ADJOURN



Sites 4, 21, and 6 Update

Restoration Advisory Board Meeting
Naval Weapons Station Yorktown
February 19, 2003

Mr. Jeffrey Harlow, Presenter
Atlantic Division, Naval Facilities Engineering Command
Remedial Project Manager



Site 4

- Removal Action continues
- Anticipated completion is Winter 2003
- The site will be cleaned to residential levels and there will be no Land Use Controls.

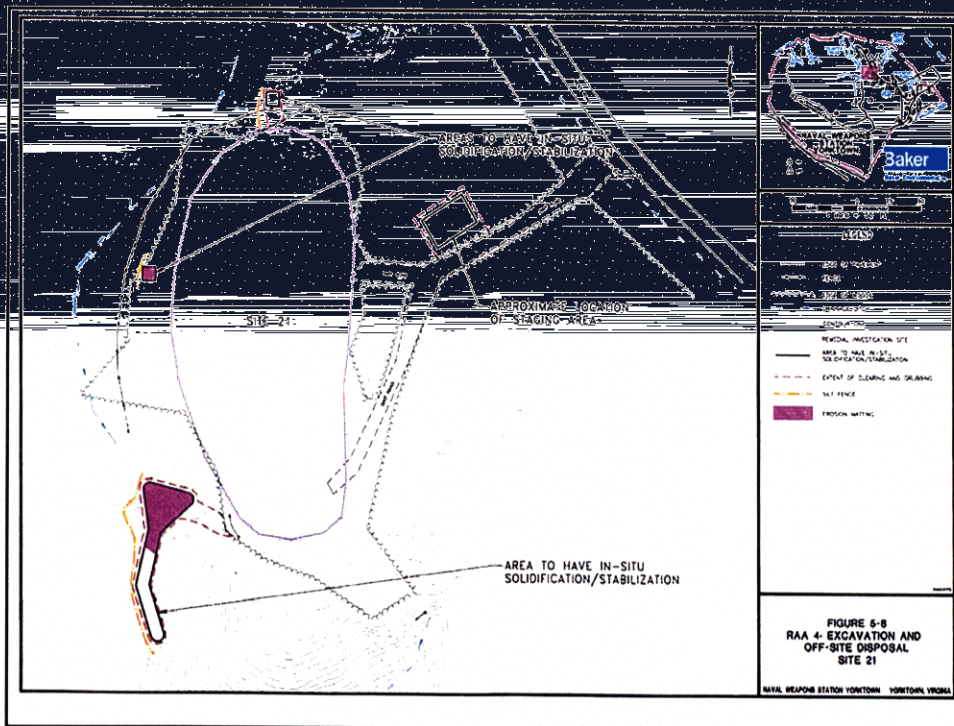
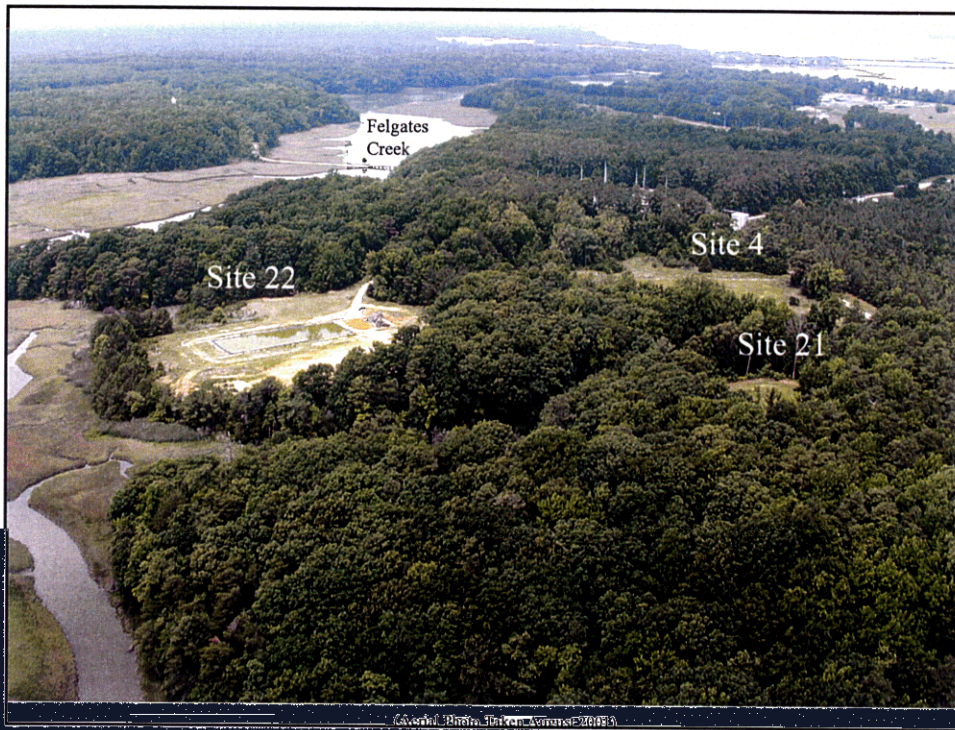


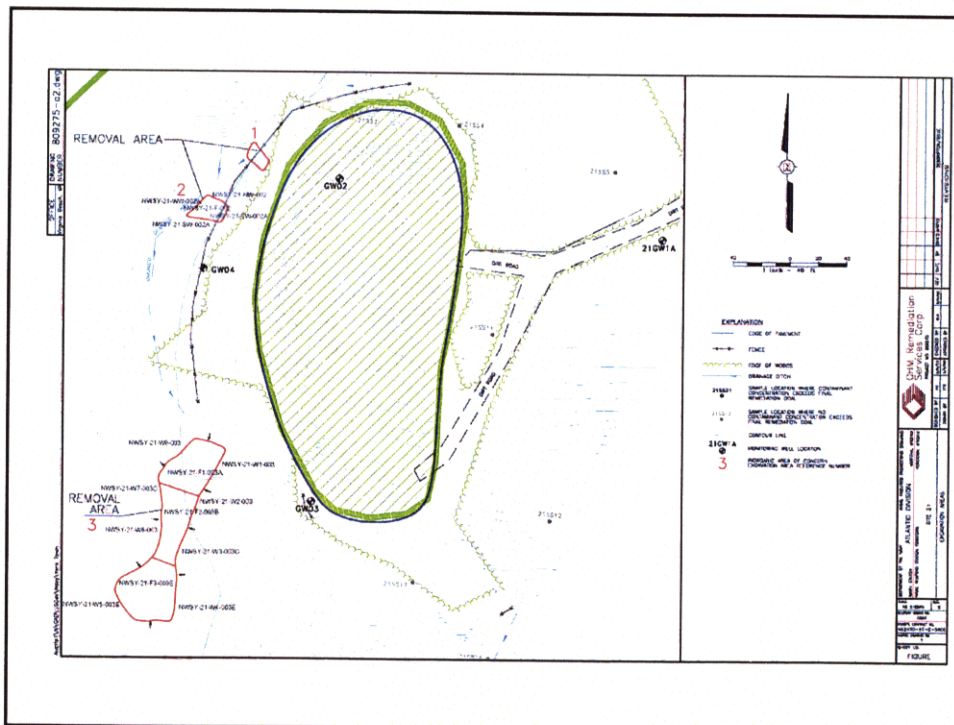
Site 4 Remediation in Progress – Southwest View
(Aerial Photo Taken November 2002)

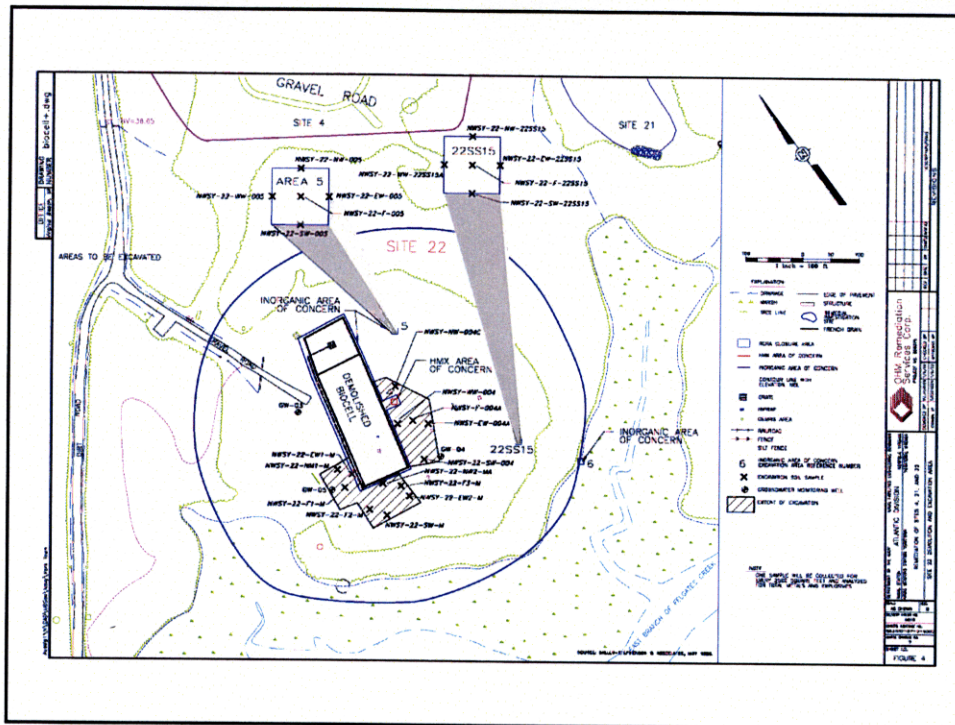


Site 21

- ✚ Removal Completed
- ✚ Considering planting wetland vegetation along small tributary that drains into Felgates Creek – Cost: Approx. \$600.00







Site 6

- Bioremediation of Lift 3 Complete*
- Lift 4 to begin Spring 2003
- Considering soil consolidation and in situ treatment at Site 6 Impoundment Area to:
 - Manage contaminated soil in a smaller area
 - Establish total soil volumes to be treated
 - Allow for a more uniform mixing of soil
 - Start bioremediation prior to ex situ treatment at the biocell

*Approximately 50 tons of original 40,000 ppm explosive-contaminated soil will be reapplied to biocell along with Lift 4 soil.



Site 23 Update

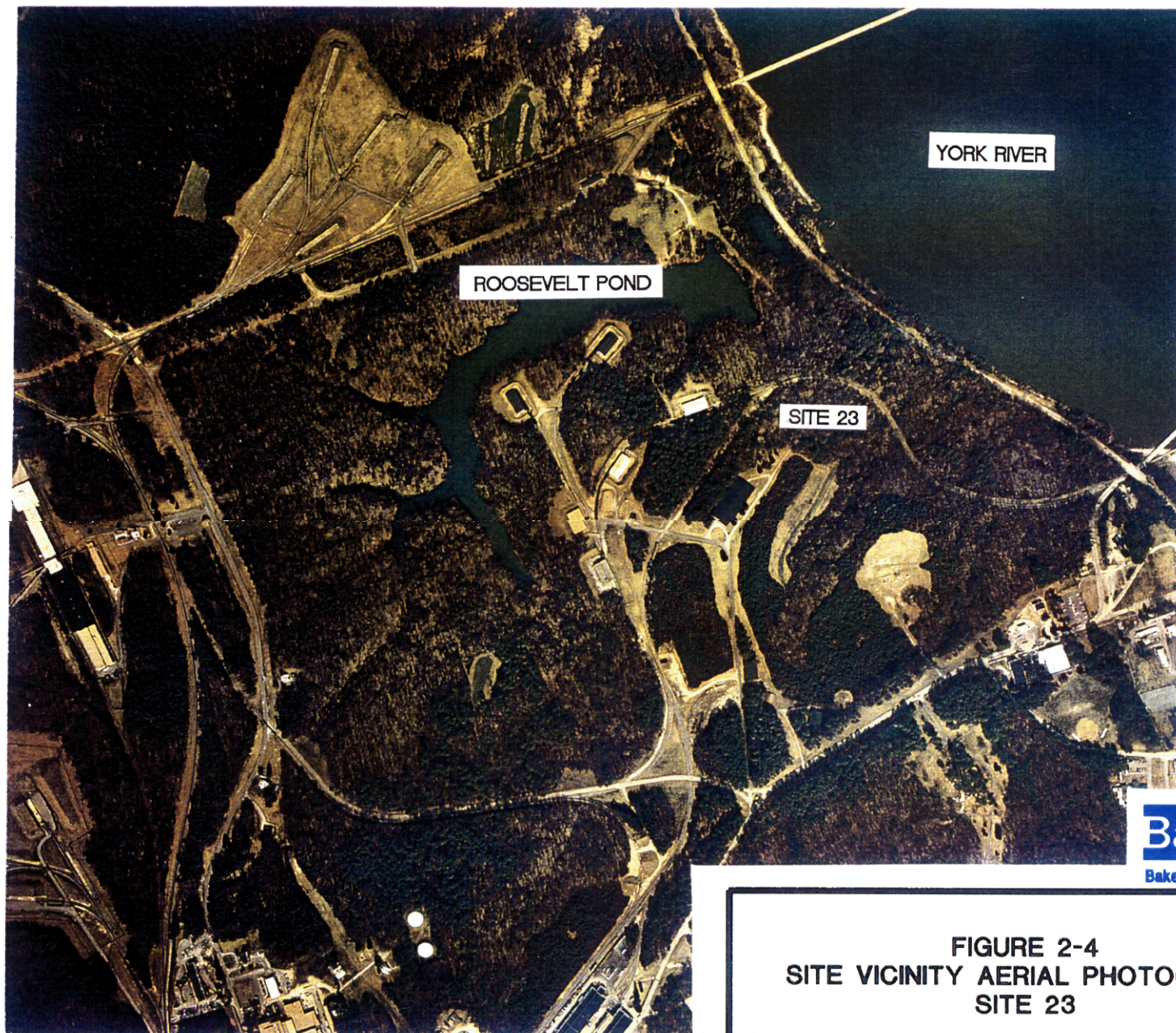
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Mr. Jeffrey Harlow, Presenter
Atlantic Division, Naval Facilities Engineering Command
Remedial Project Manager



Site 23

- Remedial Action for Site 23 has started
- Remedial Action will involve the removal of soils contaminated with Mercury, Polynuclear Aromatic Hydrocarbons (PAHs), and Zinc



YORK RIVER

ROOSEVELT POND

SITE 23

Baker
Baker Environmental, Inc.

FIGURE 2-4
SITE VICINITY AERIAL PHOTOGRAPH
SITE 23

NAVAL WEAPONS STATION YORKTOWN

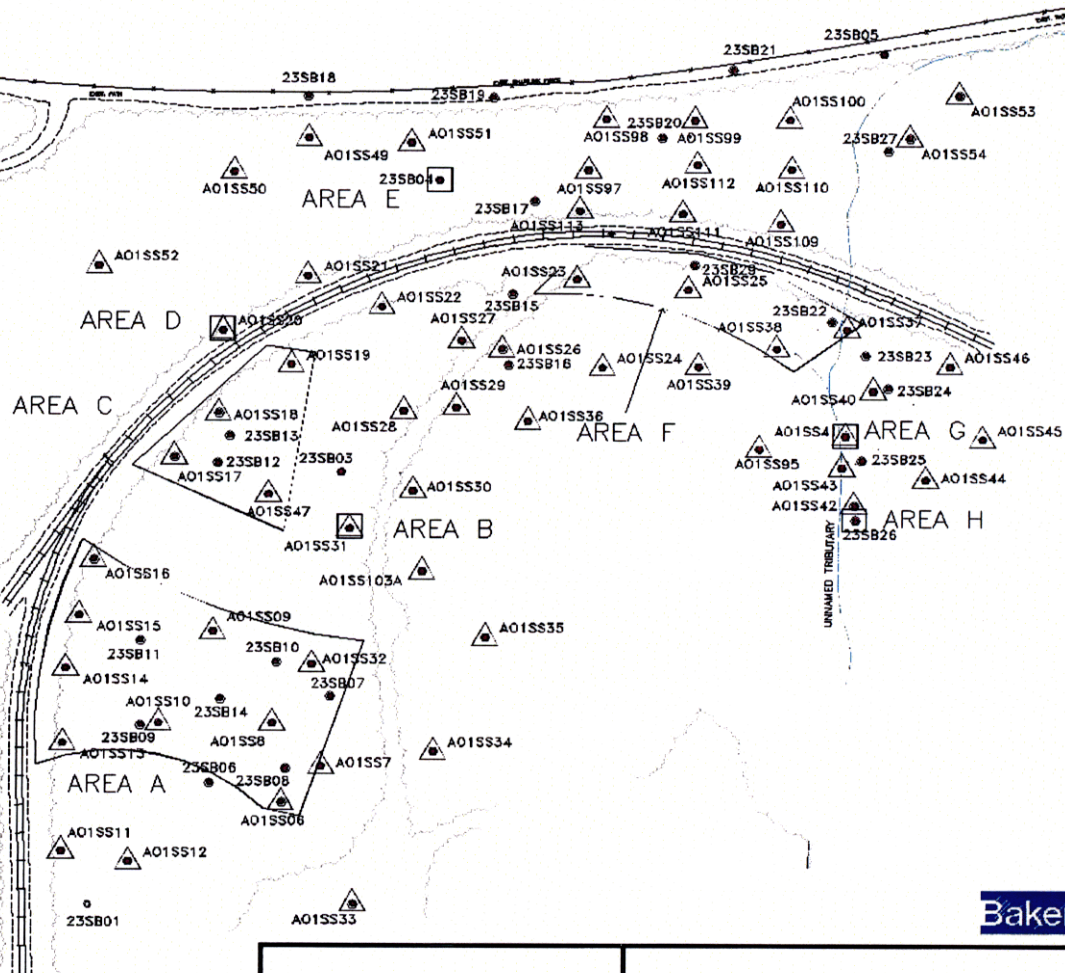
YORKTOWN, VIRGINIA

TOTAL AREA=75,105 SQ FT
 TOTAL VOL=5600 CY (9000 TONS)
 ASSUMES 2 FT DEPTH

AREA	SQUARE FEET	DRIVER
A	43,504	PAHs
B	425	MERCURY
C	13,306	PAHs
D	425	ZINC
E	425	MERCURY
F	16,170	PAHs
G	425	ARSENIC
H	425	ARSENIC

CONTAMINANT	DRIVER	PRG (MG/KG)
cPAHs	HH&ECO	1
PAHs	ECO	10
N-NITROSODI-N-PROPYLAMINE	HH	0.0813
2,4,6-TRINITROTOLUENE	HH	14.3
ARSENIC	HH&ECO	TBD(HH=0.369)
CYANIDE	ECO	TBD
MERCURY	ECO	0.24
ZINC	ECO	200

NOTE: ARSENIC HOTSPOTS BASED ON BACKGROUND LEVEL
 OF 14.8 MG/KG



REVISED: 2/10/03

100 0 50 100
 1 inch = 100 ft

PROPOSED EXCAVATION AREAS
 SITE 23

NAVAL WEAPONS STATION YORKTOWN YORKTOWN, VIRGINIA



Five-Year Review Update

Restoration Advisory Board Meeting
Naval Weapons Station Yorktown
February 19, 2003

Mr. Jeffrey Harlow, Presenter
Atlantic Division, Naval Facilities Engineering Command
Remedial Project Manager



Background

The Draft Five-Year Review Report for

Sites 1, 6, 7, 12, 16, and 19
was presented at the August 2002 RAB Meeting.

The status of the document will be presented at each RAB
meeting until it receives final signature.



Document Status

The Final Five-Year Review received
Rear Admiral Michael Loose's, Commander,
Atlantic Division, Naval Facilities Engineering
Command, signature on November 20, 2002.



Cheatham Annex Site 1 Landfill Project Update

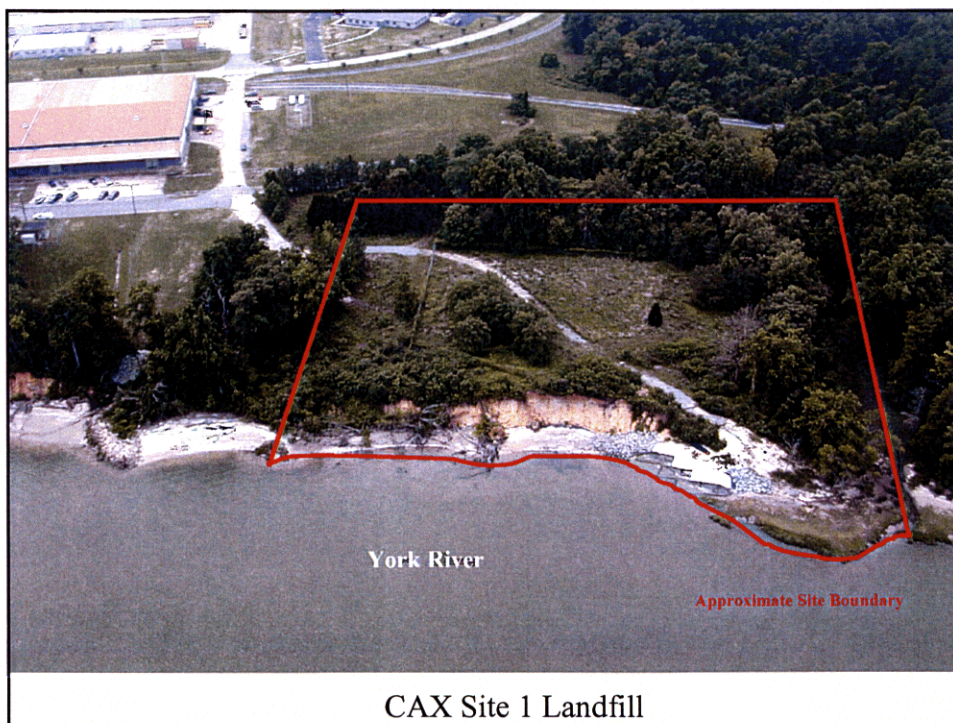
Restoration Advisory Board Meeting
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Mr. Don Joiner, P.E., Presenter
Baker Environmental, Inc., Yorktown Activity Manager



Presentation Overview

- Review site background
- Review results of Remedial Investigation
- Present plan for EE/CA and removal action





Site Background

- ✦ Used from 1942 to 1951 for disposal of incinerator ash and other wastes
- ✦ Used from 1951 to 1981 as a general landfill
- ✦ Closed in 1981, graded, and a 2-foot soil cover was installed



Remedial Investigation Results

- ✦ Landfill material includes carcinogenic PAHs, PCBs, antimony, arsenic, copper, iron, lead
- ✦ Soils: data suggests no significant impacts – low levels of PAHs may be naturally-occurring
- ✦ Groundwater: no organic contaminants; arsenic and iron detected in downgradient samples
- ✦ Sediments: limited PAH and metals contamination

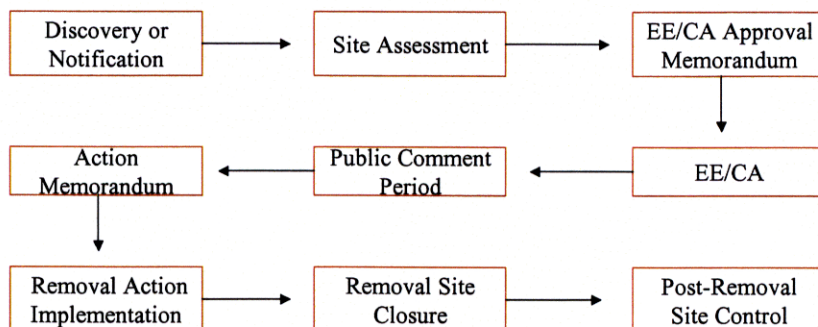


Change in Approach to Site Cleanup

- Draft Final RI Report – September 2002
- Regulatory comments will require an evaluation of ecological risks
- Navy committed to moving forward with site cleanup
- Partnering Team agreed in January 2003 to move forward with removal action for site



Engineering Evaluation/ Cost Analysis Process





CAX Site 1 Schedule

Draft EE/CA

21 Feb 2003

~~Draft Final EE/CA~~ ~~3 March 2003~~

Review Meeting
at USEPA 11 March 2003

Final EE/CA 28 March 2003

Public Notice 30 March 2003

Award Contract for
Remedial Action April 2003

Estimated Landfill Depth

Estimated Landfill Volume - 11,500 CY

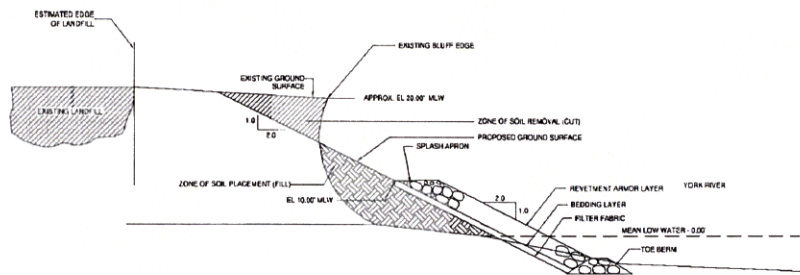
CHEATHAM ANNEX SITE 1 LANDFILL

Legend

- Test Trench
- Location Landfill Thickness
Data Used to Generate the TINs
- Landfill Thickness
 - 17-620 Ft.
 - 16-17 8 Ft.
 - 12-6-16 Ft.
 - 10-12 8 Ft.
 - 7-6-10 Ft.
 - 6-7 8 Ft.
 - 2-6 8 Ft.
 - 0-2-6 Ft.
 - 0-0 8 Ft.

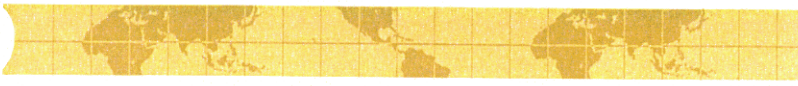


Planned Shoreline Restoration



2002 CAX Shoreline Repair





Questions or Comments ?





Groundwater Operable Unit 1

Sites 1, 3, SSA3, 6, 7, 11, 17, 24 and 25
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Baker Environmental, Inc., Yorktown Activity Manager



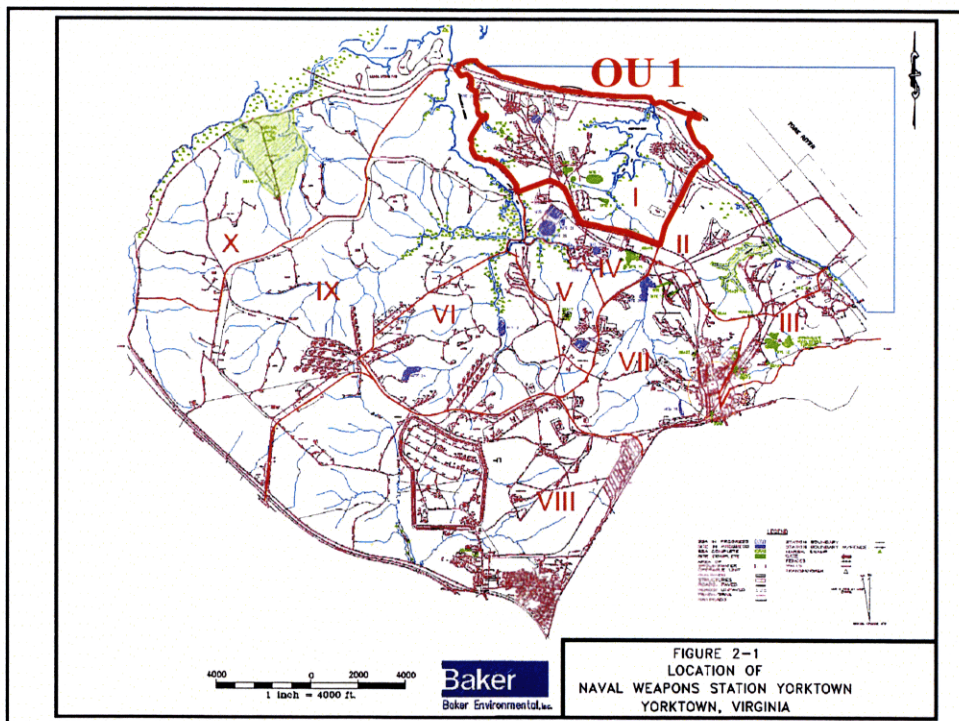
Presentation Overview

- ✦ Review project history
- ✦ Review approach for investigation
- ✦ Update project schedule



Groundwater Operable Unit Strategy

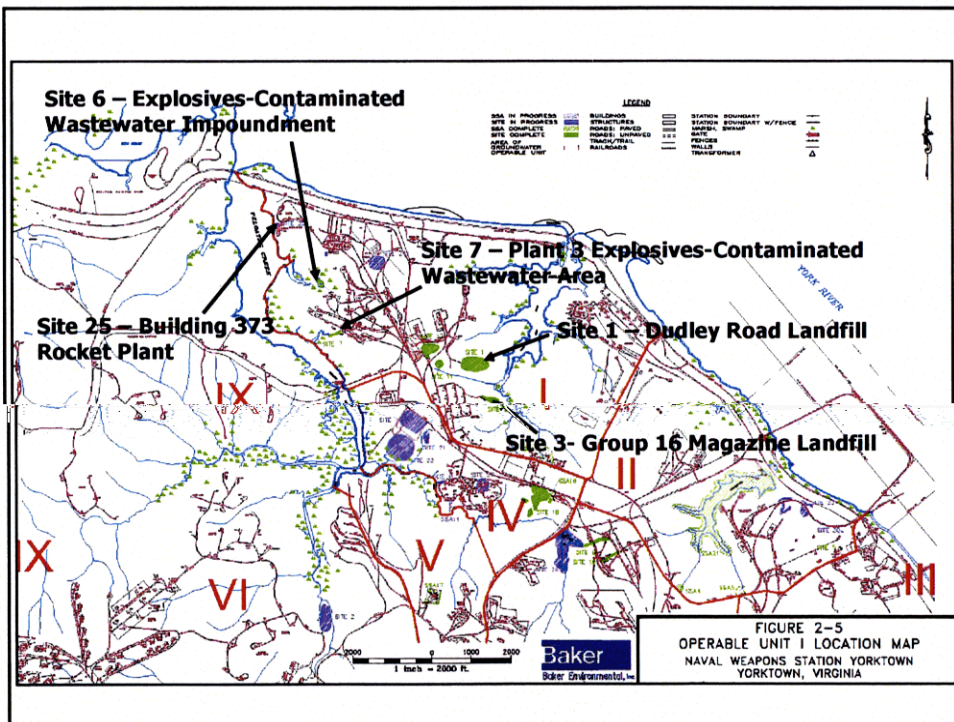
- Define groundwater at NWSY in terms of Operable Units
- Prioritize and evaluate GW OUs over the next several years
- Evaluate the impact that groundwater may have on human health and ecological receptors

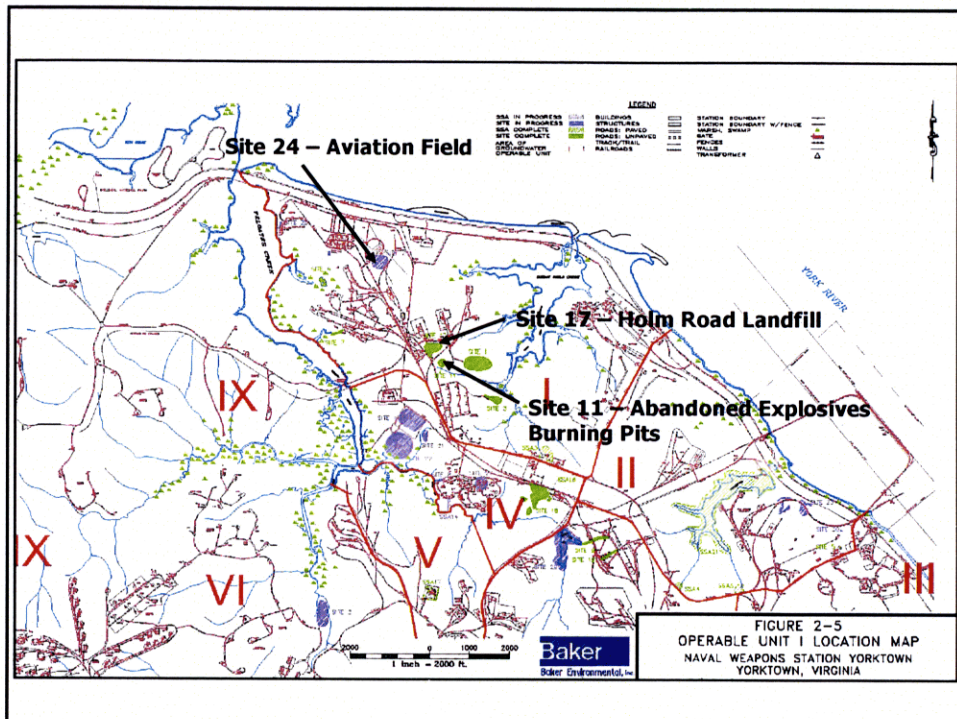




Project History

- April 2002 - Draft GW OU 1 Work Plan submitted for review
- May 2002 - GW OU 1 Background presented to RAB
- June 2002 - EPA comments on Work Plan
- November 2002 - Based on Partnering Team discussions, revised Work Plan submitted





Overall Technical Approach for Evaluating GW OU 1

- Use groundwater data collected from previous Remedial Investigations
- Use LTM data from Sites 1, 3, 6, 7, and 25
- Collect additional data to fill “data gaps”
- Conceptual Site Model - consider reasonable current and future potential exposures and media of concern.
- Use existing and new data to evaluate potential human health and eco risks caused by GW – based on Conceptual Site Model



Conceptual Site Model for GW OU 1

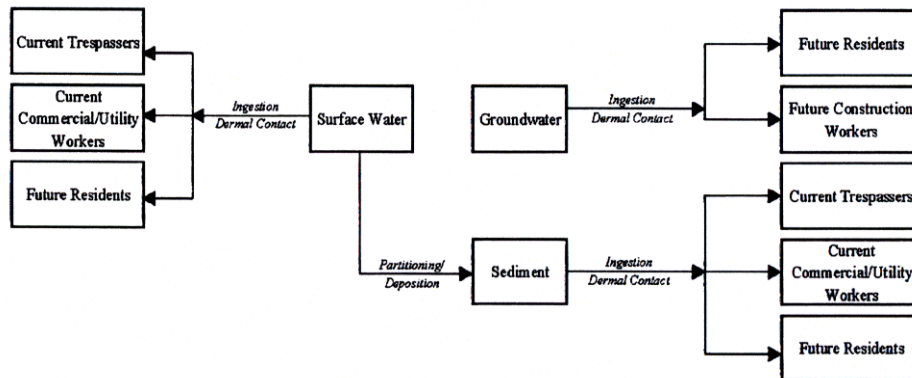
- ✚ Potential affected media:
 - Groundwater
 - Surface water
 - Sediment
 - Surface and subsurface soil



Conceptual Site Model for GW OU 1

- ✚ Current potential exposure scenarios limit GW access or exposure to:
 - ~~Adult and adolescent trespassers~~
 - Ecological receptors
- ✚ No current exposure to GW for Station employees because of depth to GW and poor GW quality
- ✚ Future residential use scenario will be evaluated

**FLOWCHART OF POTENTIAL HUMAN HEALTH EXPOSURE PATHWAYS AND RECEPTORS
GROUNDWATER OPERABLE UNIT 1
NAVAL WEAPONS STATION YORKTOWN, YORKTOWN, VIRGINIA**



Technical Approach Groundwater Sampling

✚ Collect 1 round of samples from:

- Site 1 – 6 existing wells
- Site 3 – 2 existing wells
- Site 6 – 5 existing wells & 5 new wells
- Site 7 – 3 existing wells
- Site 25 – 4 existing wells

✚ Samples from 1, 3, and 25 will be collected as part of LTM



Technical Approach Surface Water/Sediment Sampling

- ✦ Sites 1 and 3
 - six samples collected along Indian Field Creek between Sites 1 and 3
- ✦ Site 7
 - four samples collected on a tributary of Felgates Creek
- ✦ Site 25
 - six samples along Felgates Creek, down-gradient of site

*Note: Sediment samples will be collected from 0-4 (surface) and 4-8 (subsurface) inches at each location.



GW OU 1 Project Schedule

Nov 2002 – Draft Final Work Plan Submitted

May 2003 – Field Investigation

Sept 2003 – Draft RI Report

Dec 2003 – Draft Feasibility Study

Jan 2004 – Final RI

April 2004 – Final FS

July 2004 – Final PRAP

Nov 2004 – Final ROD



Upcoming Records of Decision

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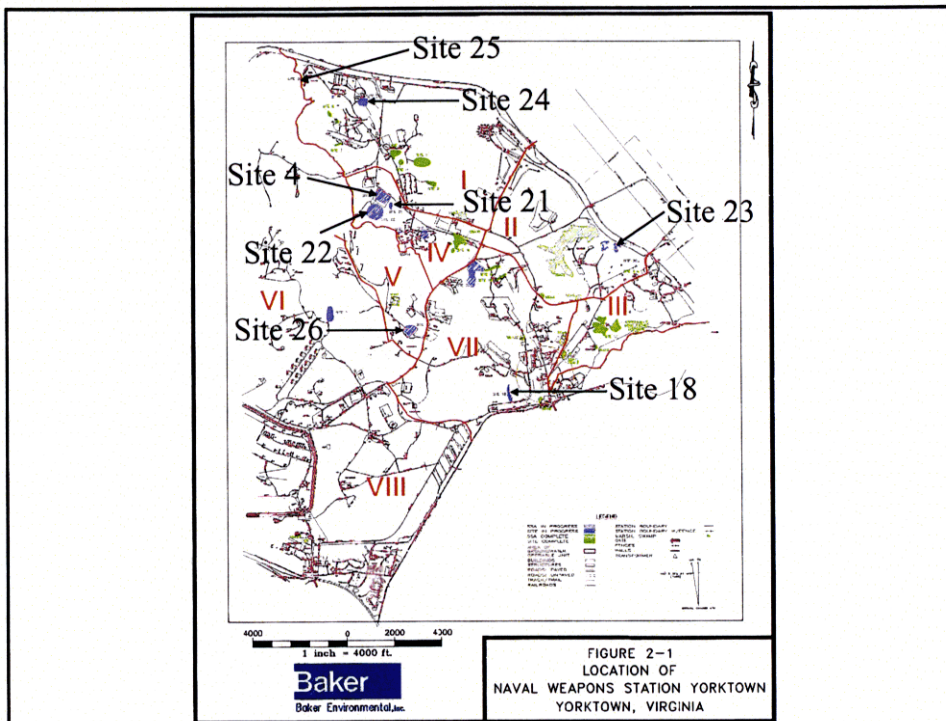
Ms. Valerie Walker, Presenter
Commander, Naval Region Mid-Atlantic, Regional Environmental Group
Installation Restoration Program Manager



WPNSTA FY 2003

- ❖ Site 4 Burning Pad Residue Landfill – FINAL ROD
- ❖ Site 18 Bldg. 476 Discharge Area – FINAL ROD
- ❖ Site 21 Battery & Drum Disposal Area – FINAL ROD
- ❖ Site 22 Burn Pad – FINAL ROD
- ❖ Site 23 Teague Road Disposal Area & Site 24 Aviation Field – FINAL ROD
- ❖ Site 25 Bldg. 373 Rocket Plant & Site 26 Bldg. 1816 Mark 48 Waste Otto Fuel Tank – FINAL ROD*

*Tentative. May not be completed until FY 2004



CAX FY 2003

- ❖ Site 1 Landfill Near Incinerator – FINAL ROD
- ❖ Site 11 Bone Yard – FINAL ROD

